

21st June 1960.COCOM Document 3715.44/7COORDINATING COMMITTEERECORD OF DISCUSSIONONNETHERLANDS PROPOSAL CONCERNING THE INTERPRETATION OFITEMS 1544 AND 1560 - SILICON DIODES16th June 1960

Present: Belgium(Luxembourg), Canada, Denmark, France, Germany, Italy, Netherlands, United Kingdom, United States.

References: COCOM Docs. Nos. 3715.44/4, 5 and 6 and 3715.60/1.

1. The CHAIRMAN reminded the Committee of the discussion which had already taken place in this connexion as recorded in COCOM Doc. 3715.44/6. He referred in particular to the reservation made by the French Delegation in paragraph 11 of the abovementioned document, and invited delegates to resume discussion.
2. The NETHERLANDS Delegate stated that his authorities shared the view expressed by the French Delegation to the effect that tubes and semi-conductors were not caught by the term "components" in Item 1560. To avoid any differences of interpretation, they therefore suggested that the Note to Item 1560 should explain that tubes and semi-conductors were not considered to be covered by that item.
3. The UNITED STATES Delegate repeated that his authorities concurred with the initial Netherlands' proposal. However, they could not agree with the French interpretation of Item 1560, now adopted by the Netherlands Delegation, insofar as that interpretation excluded electronic tubes and semi-conductors. The United States authorities considered electronic valves or tubes and semi-conductor devices as electronic components and had never before doubted that all participating countries would also clearly recognise this to be the case. If the French term "pièces détachées" did not include electronic tubes and semi-conductors, the Delegate hoped that some alternative phrasing might be found which would conform the French to the English version. He recalled that an extended discussion had taken place during the 1958 List Review, in which the use of radios under desert conditions had been explored by technical experts, including French experts. In the opinion of the United States experts who participated in those discussions, the latter had clearly reflected the understanding that electronic tubes and semi-conductors were electronic components within the meaning of Item 1560. The Delegate further stated that his authorities did not understand what specific items of equipment the French Government wished to see excluded from Item 1560, since the issue of semi-conductor diodes could be satisfactorily resolved by the Netherlands proposal, and electronic tubes and other semi-conductor devices were already embargoed under other International List definitions, e.g.:
 - a) Item 1558(e) embargoed valves and tubes designed for operation at ambient temperatures exceeding 100°C. (whatever the lower cut-off);
 - b) Item 1545(b) embargoed transistors and related devices using bulk semi-conductor materials other than germanium;

Germanium transistors and related devices did not operate at ambient temperatures exceeding 100°C. and indeed very few could even be stored at such temperatures. The Delegate noted that the above controls had existed for some time.

It was true that in the future some difficulty could arise with the development of germanium devices which would operate at temperatures encompassed by Item 1560. Such developments would lend important military significance to these devices, and would fully warrant their inclusion under embargo coverage.

4. The Delegate stated that his authorities therefore believed that Item 1560 properly included electronic tubes and semi-conductors within its embargo coverage. This position was believed to be consistent with Administrative Principle No. 2, and was that an item definition included full coverage of its description except where a specific exclusion or interpretation was written into either the definition itself or the Interpretative Notes to the International Lists. The United States authorities believed that, if a definition by its terms described coverage which, in whole or part, was excluded from a more specific International List definition, the broader definition maintained the embargo over the items which would have been excluded under the more specific definition. Such general definitions, e.g. Item 1560, remained subject to normal Committee devices such as "accident of definition" procedure, clarification of coverage by modification of terminology, specification of exceptions, or by major revision of the definition. Full Committee approval was required for such action after a basic definition had been accepted by Member Governments, and such action should not be considered a matter appropriate for unilateral interpretation.

5. The FRENCH Delegate stated that he was surprised to see the position taken up by the United States authorities on the definition of Item 1560. He believed that when the matter had been studied in 1958, there had been no intention of including tubes and semi-conductors under the term "components". Moreover when these types of equipment were classed in the United States, a distinction was always made between such elements as inductors, condensers, capacitors etc. on the one hand, and tubes and semi-conductors on the other. United States army specifications always listed all components together, but grouped tubes and semi-conductors quite separately under a special heading, using none of the terminology employed in the case of components. The Delegate believed that an attempt should be made to clarify the meaning of "electronic components" by stating that elements using free electrons, e.g. electronic tubes where emission was produced at a certain temperature or semi-conductors where emission was produced at ordinary temperatures, were not "components".

6. The UNITED KINGDOM Delegate stated that he had nothing to add for the time being. He presumed that the German Memorandum submitted that day (COCOM Doc. 3715.60/1) had some bearing on the question, and undertook to give further views after studying the latter.

7. The GERMAN Delegate agreed that the two questions were linked. In their proposal, the German authorities were prepared to consider as "electronic components" and therefore as covered by Item 1560 components having so-called "free electrons". The elements they were proposing to exclude in their redefinition, however, were general electric components such as resistors, condensers and capacitors, and not electronic tubes and semi-conductors. The Delegate added that he had no particular instructions on the view expressed by the French Delegation. He was therefore unable to say whether his authorities shared the view that tubes and semi-conductors meeting the terms of 1560(a) and (b) were already excluded from embargo.

8. The UNITED STATES Delegate stated that he was disappointed to see the divergence of views between United States and French experts, and undertook to refer the latter's statement to his Government. He asked the French Delegation if they were in a position to identify more specifically the precise items they wished to have excluded from Item 1560.

9. The BELGIAN Delegate stated that his authorities shared the view of the French and Netherlands Delegations that diodes and semi-conductors were not covered by Item 1560. They did not believe that parts covered by Item 1560

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could be confused with those covered by Item 1544, or by any other electronic items such as 1541, 1545 etc. They considered the term "electronic components" appearing in Item 1560 to cover parts such as resistors, capacitors, inductors, etc. and any other types not caught by Item 1544 or other items in the electronics series.

10. A lengthy exchange of views ensued, during which the GERMAN Delegate asked his French and Netherlands colleagues whether their authorities actually considered the range of equipment not covered by Items 1544 and 1545 but meeting the terms of Item 1560 to be free from embargo, or whether they believed that such equipment should be free unless covered by other definitions. Furthermore he wished to know if any concrete examples could be given of tubes and semi-conductors having the characteristics described in Item 1560 and not caught by other items in the electronics series. The NETHERLANDS Delegate undertook to consult his experts in this connexion and to give a reply at the next meeting. The FRENCH expert stated that he did not think that such equipment existed at present. In view of the wide range of temperatures required, it would be necessary to test electronic tubes to see if they could withstand the change from -45°C. to +100°C., and it was highly improbable that they could. At the present stage of development this would in any event be an uneconomical proposition. As for semi-conductors, they were at present unable to keep their characteristics in this temperature range without special cooling and heating devices.

11. Upon a question from the CHAIRMAN as to whether the French Delegation could withdraw their reservation on the Netherlands proposal even though they did not consider the latter to be essential, the FRENCH Delegate stated that, although for the time being the question might be one of principle only, it could become one of substance in the very near future. It was therefore necessary to study the divergence of views existing between French and United States experts in order to find an interpretation which would meet with unanimous approval. Consequently, he could not withdraw his Delegation's reservation for the time being.

12. The CHAIRMAN suggested that the matter could best be studied together with the new German proposal (COCOM Doc. 3715.60/1) on the 7th July when delegations were to be accompanied by experts. At that time the Committee could discuss the following three points:

- 1) The Netherlands proposal as set out in COCOM 3715.44/5.
- 2) The interpretation of the word "components" in Item 1560.
- 3) The German Memorandum (COCOM 3715.60/1).

13. The COMMITTEE agreed to this suggestion and also noted that, although certain delegations did not believe it essential to modify the definitions of Items 1544 and 1560 in the manner proposed by the Netherlands Delegation, the practice of licensing authorities in the large majority of member countries was to regard silicon diodes not covered by Item 1544 as not falling under the terms of Item 1560.

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